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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: En-Dong Xun

Examiner: Abebe, Daniel Demelash

Patent No.: 6,990,439

Group Art Unit: 2655

Issue Date: Jan. 24, 2006

Confirmation No.: 8180

Customer No.: 22971

Docket No: 150884.01

Title: METHOD AND APPARATUS FOR PERFORMING MACHINE TRANSLATION USING A UNIFIED  
LANGUAGE MODEL AND TRANSLATION MODEL

Attn: Certificate of Correction Branch  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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- ☒ Request for Certificate of Correction (1 pg.).
- ☒ Certificate of Correction Form - PTO-1050 (2 pgs.)
- ☒ A return postcard.

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**Customer Number: 22971**

By \_\_\_\_\_/Henry Gabryjelski/  
Attorney Name: Henry Gabryjelski  
Reg. No.: 62828

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Christine Hartness  
Christine Hartness

Certificate  
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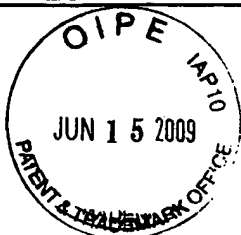
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USING A UNIFIED LANGUAGE MODEL AND TRANSLATION MODEL

REQUEST FOR CERTIFICATION OF CORRECTION

Attn: Certificate of Correction Branch  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

It is requested that a Certificate of Correction be issued correcting printing errors appearing in the above-identified United States patent. Two copies of the text of the Certificate in the suggested form are enclosed.

Pursuant to 1.20(a), the examiner is authorized to charge the Certificate of Correction fee of \$100.00 to the Deposit Account No. **50-0463**.

Issuance of the Certificate of Correction would neither expand nor contract the scope of the claims as properly allowed, and re-examination is not required.

The Examiner is authorized to charge any additional fees or credit overpayment to Deposit Account No. **50-0463**.

Respectfully submitted,

**Customer Number: 22971**Date April 17, 2009

By /Henry Gabryjelski/ 06/15/2009 MDLAWCO 00000037 500463 6990439  
Attorney Name: Henry Gabryjelski  
Reg. No.: 62828 01 JUL 2009 100.00 DA

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Christine Hartness

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(Also Form PTO-1050)

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO : 6,990,439

DATED : Jan. 24, 2006

INVENTOR(S) : En-Dong Xun

It is certified that error appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the face page, in field (56), under "Other Publications", in column 2, line 8, delete "Informetie" and insert - - Informatie - -, therefor.

In column 6, line(s) 38-57, below "FIG. 3." delete "Therefore, bi-lingual pattern data store 210 illustratively includes a plurality of English phrases (such as phrase E) followed by a corresponding plurality of linguistic patterns in the second language (such as the linguistic pattern set out in FIG. 4B)which correspond to, and are possible linguistic translation patterns of, the English phrase E. In step 234 in FIG. 3A, pattern probability model 218 retrieves those patterns (referred to as patterns 232) from bi-lingual pattern data store 210, based on the English input phrase E.

Probability generator 212 then selects one of the linguistic patterns 232 as indicated by block 236 in FIG. 3A. Probability generator 212 then generates a translation probability for the selected linguistic pattern. As will be described in greater detail later with respect to FIG. 5, the translation probability is a combination of probabilities generated by pattern probability model 218, translation model 216 and language model 220. The combined translation probability is then provided by probability generator 212 to translator component 214. Calculation of the translation probability is indicated by block 238 in FIG. 3A."

In column 6, line 67, delete "FIG. 3A" and insert - - FIG. 3 - -, therefor.

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PATENT NO. 6,990,439

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➡ Page 5 of 6

Atty Docket No: 150884.01

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO : 6,990,439  
DATED : Jan. 24, 2006  
INVENTOR(S) : En-Dong Xun

It is certified that error appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In column 7, line(s) 43-62, below "FIG. 5." delete "FIG. 5 is a flow diagram illustrating the calculation of the translation probability (illustrated by block 238 in FIG. 3A) in greater detail. FIG. 5 illustrates that pattern probability model 218 calculates the pattern probability associated with the selected pattern. This is indicated by block 246. FIG. 5 also shows that language model 220 calculates the language model probability for the second language, given terms in the selected pattern. This is indicated by block 248 in FIG. 5. FIG. 5 further shows that translation model 216 calculates the translation model probability for the English language phrase given the terms in the Chinese language phrase and the selected pattern. This is indicated by block 250 in FIG. 5. Finally, a combined probability is calculated for each linguistic pattern, as the translation probability, based upon the pattern probability, the language model probability and the translation model probability. This is performed by probability generator 212 and is indicated by block 252 in FIG. 5. The discussion now proceeds with respect to deriving the overall phrase translation probability based upon the three probabilities set out in FIG. 5."

In column 8, line 43, after " $p(c_i | c_{i-2}, c_{i-1})$ " delete ")".

In column 8, line 54, after " $p(c_i | c_{i-2}, c_{i-1})$ " delete ")".

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